AIR QUALITY PERMIT

Issued To: Bitter Creek Pipelines, LLC
Symons Central Compressor Station
P.O. Box 131
Glendive, MT 59330

Permit: #3250-00
Application Complete: 05/09/03
Preliminary Determination Issued: 06/03/03
Department's Decision Issued: 06/30/03
Permit Final: 07/16/03
AFS: #003-0019

An air quality permit, with conditions, is hereby granted to Bitter Creek Pipelines, LLC (BCPL), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Permitted Equipment

Permit #3250-00 is issued to BCPL for the construction and operation of the Symons Central Compressor Station. The facility is a coal bed methane natural gas central compressor station. A complete list of the permitted equipment is contained in Section I.A of the permit analysis

B. Plant Location

The facility is located approximately 3 miles southeast of Decker, Montana, in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana.

SECTION II. Conditions and Limitations

A. Emission Limitations

1. Emissions from each of the six 1,680-horsepower (Hp) Waukesha compressor engines shall be controlled by a non-selective catalytic reduction (NSCR) unit and an air to fuel ratio (AFR) controller and emissions from each of the engines shall not exceed the following limits (ARM 17.8.752).

NO_x[1]	3.70 lb/hr
CO	7.41 lb/hr
VOC	1.85 lb/hr

2. BCPL is permitted to operate two natural gas compressor engines with a maximum rated design capacity equal to, or less than, 840-Hp. Emissions from each of the two engines shall be controlled with a NSCR unit and an AFR controller and emissions from each of the engines shall not exceed the following limits (ARM 17.8.749 and ARM 17.8.752).

NO_x[1]	1.85 lb/hr
CO	3.70 lb/hr
VOC	1.85 lb/hr

1 NO_x reported as NO_2

3. BCPL shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).

4. BCPL shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

5. BCPL shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).

B. Testing Requirements

1. Each of the six 1,680-Hp Waukesha compressor engines shall be initially tested for NO_x and CO, concurrently, to demonstrate compliance with the emission limits in Section II.A.1, within 180 days of the initial start up date of the compressor engines. Further testing shall continue on an every-5-year basis or according to another testing/monitoring schedule as may be approved by the Department of Environmental Quality (Department) (ARM 17.8.105 and ARM 17.8.749).

2. Each of the two compressor engines with a maximum rated design capacity equal to, or less than, 840-Hp shall be initially tested for NO_x and CO, concurrently, to demonstrate compliance with the emission limits in Section II.A.2, within 180 days of the initial start up date of the compressor engines. Further testing shall continue on an every-5-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. BCPL shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. BCPL shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745(1), that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by BCPL as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

D. Notification

BCPL shall provide the Department (both the Billings regional office and the Helena office) with written notification of the following information within the specified time periods (ARM 17.8.749).

1. BCPL shall provide the Department with written notification of commencement of construction of the Symons Central Compressor Station within 30 days after commencement of construction.

2. BCPL shall provide the Department with the actual start-up date of each of the six 1,680-Hp Waukesha compressor engines within 15 days after the actual start-up date of each respective engine.

3. Upon purchase, and 15 days prior to installation, BCPL shall provide the Department with written notification of the maximum rated design capacities (equal to, or less than 840-Hp) of the engines to be installed according to condition II.A.2.

4. BCPL shall provide the Department with the actual start-up date of each of the compressor engines with a maximum rated design capacity equal to, or less than, 840-Hp within 15 days after the actual start-up date of each respective engine.

SECTION III: General Conditions

A. Inspection – BCPL shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if BCPL fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving BCPL of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*. (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by BCPL may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Permit Analysis
Bitter Creek Pipelines, LLC
Symons Central Compressor Station
Permit #3250-00

I. Introduction/Process Description

Bitter Creek Pipelines, LLC (BCPL), is permitted for the construction and operation of the Symons Central Compressor Station. The facility is a coal bed methane natural gas central compressor station located approximately 3 miles southeast of Decker, Montana, in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- (6) 1,680-horsepower (Hp) Waukesha Compressor Engines
- (2) Compressor engines up to 840-Hp (not yet determined)
- (2) Glycol dehydration units up to 1 million British thermal units (MMBtu) per hour (not yet determined)
- Miscellaneous support equipment and materials including, but not limited to, tanks, tank heaters, etc

B. Source Description

The BCPL Symons Central Compressor Station Facility is a coal bed methane, natural gas central compressor station. Coal bed methane is a natural hydrocarbon gas, primarily methane, that occurs in beds of coal. Production field facilities withdraw the methane from the coal beds and send the methane to the Symons Central Compressor Station Facility to be dehydrated and compressed for transmission through the natural gas pipeline. The two glycol dehydration units are used to remove moisture from the gas and the eight compressor engines are used to boost pipeline pressure for transmitting the natural gas through the pipeline. The Symons Central Compressor Station Facility is not a production field facility; the station simply dehydrates and compresses natural gas that is received from surrounding production field facilities.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

   BCPL shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly, by telephone, whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

BCPL must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, BCPL shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. BCPL will burn natural gas in its fuel burning equipment, which will meet this limitation.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:

   40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major source of hazardous air pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAPs must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. Based on the information submitted by BCPL, the Symons Central Compressor Station is not subject to the provisions of 40 CFR Part 63, Subpart HH because the facility is not a major source of HAPs.

40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR Part 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAPs as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR Part 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR Part 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR Part 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HHH. Based on the information submitted by BCPL, the Symons Central Compressor Station is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.402 Requirements. BCPL must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed heights of the all stacks for the BCPL Symons Central Compressor Station are below the allowable 65-meter GEP stack height.

E. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. BCPL submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 When Permit Required--Exclusions. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

F. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use any air contaminant sources that have the potential to emit greater than 25 tons per year of any pollutant. BCPL has the potential to emit more than 25 tons per year of NO_x, CO, and VOC; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. BCPL submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. BCPL submitted an affidavit of publication of public notice for the April 11, 2003, issue of *The Billings Gazette*, a newspaper of general circulation in the Town of Billings in Yellowstone County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving BCPL of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

G. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's potential to emit is below 250 tons per year of any pollutant (excluding fugitive emissions).

H. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

   a. Potential to Emit (PTE) > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3250-00 for BCPL, the following conclusions were made.

   a. The facility's PTE is greater than 100 tons/year for NO_x and CO

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs

   c. This source is not located in a serious PM_{10} nonattainment area

   d. This facility is not subject to any current NSPS

   e. This facility is not subject to any current NESHAP standards

   f. This source is not a Title IV affected source, nor a solid waste combustion unit

   g. This source is not an EPA designated Title V source

   Based on these facts, the Department determined that the BCPL Symons Central Compressor Station is subject to the Title V operating permit program. In accordance with ARM 17.8.1205(c)(i), BCPL submitted a Title V Operating Permit Application, concurrently, with the submittal of the Montana Air Quality Permit Application submitted for the current permit action.

III. BACT Determination

A BACT determination is required for each new or altered source. BCPL shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination is required for each new or modified source. The BACT analysis addresses the available methods for controlling NO_x and CO emissions from the eight proposed compressor engines. The Department reviewed previous BACT determinations for compressor engines before making the following BACT determinations.

A. No Additional Controls

This practice would consist of operating the natural gas compressor engines without any add-on pollution control equipment.

B. Air Fuel Ratio (AFR) Controller (NO_x Control at the Crossover Point)

In this process, the proper air-to-fuel ratio is obtained by adjusting the engine to operate at the crossover point, where NO_x and CO emissions are equal. At the crossover point, the engine operates neither too lean nor too rich. Excess hydrocarbon in a rich fuel mixture causes incomplete combustion; thus, lowering the exhaust temperature to a point where the concentration of NO_x decreases, but the concentration of CO increases. Combustion of a lean fuel mixture occurs at higher temperatures accompanied by higher concentration of NO_x but a lower concentration of CO.

An engine can operate manually at the crossover point; however, the engine must be tuned frequently to account for operational changes such as varying engine load, operating temperature, fuel gas quality, etc.

C. Non-Selective Catalytic Reduction (NSCR) Unit

An NSCR unit controls NO_x emissions by using the CO and the residual hydrocarbons in the exhaust of a rich-burn engine as a reducing agent for NO_x. Without the catalyst, in the presence of oxygen, the hydrocarbons will be oxidized instead of reacting with NO_x. As the excess hydrocarbon and NO_x pass over a honeycomb or monolithic catalyst (usually a combination of noble metals such as platinum, palladium, and/or rhodium), the reactants are reduced to N_2, H_2O, and CO_2. The noble metal catalyst usually operates between 800 degrees Fahrenheit (°F) and 1,200°F; therefore, the unit would normally be mounted near the engine exhaust to maintain a high enough temperature to allow the various reactions to occur. In order to achieve maximum performance, 80% to 90% reduction of NO_x concentration, the engine needs to burn a rich fuel mixture, causing the engine to operate less efficiently.

D. NSCR unit with an AFR Controller

In order to provide for the most effective use of the catalyst in an NSCR unit (described in Section III.C), it is necessary to install an electronic AFR controller (described in Section III.B.). This device maintains the proper air/fuel ratio that will optimize the degree of reducing agents in order to provide maximum emission reduction while minimizing agents that can poison the catalyst.

E. Lean-Burn Engine

The lean-burn engine uses a precombustion chamber to enclose a rich mixture of air and fuel; the mixture is then ignited in this chamber. The resulting ignition front fires into the larger main cylinder that contains a much leaner fuel mixture. Staging the combustion and burning a leaner fuel mixture results in lowering of peak flame temperatures. Lower combustion temperature assures lower NO_x concentration in the exhaust gas stream; however, excess air in the fuel/air mixture can result in increased CO emissions.

F. Lean-Burn Engine with an AFR controller

The NO_x and CO emissions from a lean-burn engine can be stabilized by installing an electronic AFR controller. This device maintains the proper air to fuel ratio that will optimize the performance of the lean burn engine. A lean-burn engine with an AFR controller achieves approximately the same reduction in emissions as a rich-burn engine fitted with an NSCR unit and an AFR controller.

G. Selective Catalytic Reduction Unit

Selective Catalytic Reduction (SCR) is a post combustion technology that has been shown to be effective in reducing NO_x emissions from lean burn engines. SCR units can achieve NO_x control efficiencies as high as 90% for lean burn engines that are operated at a constant load. An SCR unit selectively reduces NO_x emissions by injecting either liquid anhydrous ammonia or aqueous ammonium hydroxide into the exhaust gas stream prior to the gas stream reaching the catalyst. The catalyst is typically made from noble metals, base metal oxides such as vanadium and titanium, and zeolite-based material. NO_x, NH_3, and O_2 react on the surface of the catalyst to form N_2 and H_2O. For an SCR unit to operate properly, the exhaust gas must be within a particular temperature range (typically between 450°F and 850°F). The catalyst that is utilized dictates the temperature range. Exhaust gas temperatures greater than the upper limit will pass the NO_x and NH_3 through the catalyst prior to the reaction. NH_3 emissions, called ammonia slip, are a key consideration when specifying an SCR unit.

H. Catalytic Oxidation

Catalytic Oxidation is a post combustion technology that has been applied to oxidize CO emissions from lean burn engines. As mentioned in Section 3.E of this permit analysis, lean burn technologies may cause increased CO emissions. In a catalytic oxidation system, CO passes over a catalyst, usually a noble metal, which oxidizes the CO to CO_2 at efficiencies of 70-90%.

I. Summary

While no additional controls would have no energy or economic impacts on BCPL, no additional controls would have negative impacts on air quality. Therefore, the Department determined that no additional controls will not constitute BACT for the natural gas compressor engines.

Use of an AFR controller to adjust the engine to operate at the crossover point results in both NO_x and CO emissions at reasonable levels for lower power engines. However, an AFR controller does not provide as high of a reduction in NO_x and CO emissions as an NSCR unit; therefore, the Department determined that an AFR controller, alone, will not constitute BACT for the natural gas compressor engines.

An NSCR unit can also be used to effectively reduce NO_x and CO emissions. However, the engine needs to burn a rich fuel mixture to achieve maximum performance, causing the engine to operate less efficiently and an NSCR unit does not provide as high of a reduction in NO_x and CO emissions as an NSCR unit with an AFR controller. Therefore, the Department determined that an NSCR unit, alone, will not constitute BACT for the natural gas compressor engines.

A lean-burn engine with an AFR controller can be utilized to effectively reduce NO_x and CO emissions. A lean-burn engine has a higher initial cost than a rich-burn engine fitted with an NSCR unit and an AFR controller; however, since there is no add-on equipment, the lean-burn

engine requires far less maintenance than a rich-burn engine fitted with an NSCR unit and an AFR controller. However, because BCPL proposed to install a rich burn engine and because a lean-burn engine with an AFR controller achieves approximately the same reduction in emissions as a rich-burn engine fitted with an NSCR unit and an AFR controller, the Department determined that neither a lean burn engine, nor a lean burn engine with an AFR controller will constitute BACT in this case.

An SCR unit can also be utilized to effectively reduce NO_x emissions; however, SCR units are only applicable to lean burn engines because a high oxygen concentration (as found in lean burn engines) is needed for the unit to operate properly. In addition, for engines that typically operate at variable loads, such as engines utilized for natural gas transmission, an SCR unit may not function effectively and may cause either periods of ammonia slip or periods of insufficient ammonia injection. An oxidation catalyst may be used in conjunction with an SCR unit to effectively reduce CO emissions; however, as with an SCR unit, oxidation catalysts are only applicable to lean burn engines because a high oxygen concentration (as found in lean burn engines) is needed for the unit to operate properly. Because SCR units and oxidation catalysts require excess O_2 to operate properly and because SCR units are not used on engines that operate at variable loads (such as natural gas compressor engines), the Department determined that a lean burn engine with an SCR unit and/or an oxidation catalyst will not constitute BACT in this case.

The Department determined that an NSCR unit with an AFR controller constitutes BACT for NO_x and CO emissions resulting from the operation of the proposed natural gas compressor engines. NSCR/AFR control equipment typically constitutes BACT for rich-burn compressor engines. An NSCR unit with an electronic AFR controller effectively reduces NO_x and CO emissions and is an economically and environmentally feasible option. The pound per hour BACT emission limits for the 1,680-Hp compressor engines, as stated in conditions II.A.1 of the permit, were determined using 1.0 gram per horsepower-hour (g/Hp-hr) for NO_x, 2.0 g/Hp-hr for CO, and 0.5 g/Hp-hr for VOC. The pound per hour BACT emission limits for the compressor engines equal to, or less than 840-Hp, as stated in conditions II.A.2 of the permit, were determined using 1.0 g/Hp-hr for NO_x, 2.0 g/Hp-hr for CO, and 1.0 g/Hp-hr for VOC.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the BACT emission limits.

IV. Emission Inventory

Ton/year					
Source	PM_{10}	NO_x	VOC	CO	SO_x
1,680-Hp Waukesha Compressor Engine (EU1)	0.61	16.21	8.10	32.46	0.04
1,680-Hp Waukesha Compressor Engine (EU2)	0.61	16.21	8.10	32.46	0.04
1,680-Hp Waukesha Compressor Engine (EU3)	0.61	16.21	8.10	32.46	0.04
1,680-Hp Waukesha Compressor Engine (EU4)	0.61	16.21	8.10	32.46	0.04
1,680-Hp Waukesha Compressor Engine (EU5)	0.61	16.21	8.10	32.46	0.04
1,680-Hp Waukesha Compressor Engine (EU6)	0.61	16.21	8.10	32.46	0.04
840-Hp Compressor Engine (EU6)	0.31	8.10	8.10	16.21	0.02
840-Hp Compressor Engine (EU7)	0.31	8.10	8.10	16.21	0.02
1 MMBtu/hr Dehydrator #1	0.03	0.44	0.02	0.37	0.00
1 MMBtu/hr Dehydrator #2	0.03	0.44	0.02	0.37	0.00
Miscellaneous Tanks (53)	0.00	0.00	10.0	0.00	0.00
Miscellaneous Tank Heaters (3)	0.06	0.66	0.03	0.54	0.00
Total	4.40	115.00	74.87	228.46	0.28

1,680-Hp Compressor Engines (6 Engines)
Brake Horsepower: 1680 bhp
Hours of operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 14.28 MMBtu/hr (Maximum Design)
Calculations: 14.28 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.14 lb/hr
0.14 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.61 ton/yr

NO_x Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 3.70 lb/hr
3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.21 ton/yr

VOC Emissions
Emission factor: 0.5 gram/bhp-hour (BACT Determination)
Calculations: 0.5 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.10 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 7.41 lb/hr
7.41 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 32.46 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 14.28 MMBtu/hr (Maximum Design)
Calculations: 14.28 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.01 lb/hr
0.01 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.04 ton/yr

Up to 840-Hp Compressor Engines (2 Engines)
Brake Horsepower: 840 bhp
Hours of operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 7.14 MMBtu/hr (Maximum Design)
Calculations: 7.14 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.07 lb/hr
0.07 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.31 ton/yr

NO_x Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 840 bhp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.10 ton/yr

VOC Emissions
Emission factor: 1.0 gram/bhp-hour (BACT Determination)
Calculations: 1.0 gram/bhp-hour * 840 bhp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 4.07 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 840 bhp * 0.002205 lb/gram = 3.70 lb/hr
3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.21 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 7.14 MMBtu/hr (Maximum Design)
Calculations: 7.14 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.004 lb/hr
0.004 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.02 ton/yr

Up to 1.0 MMBtu/hr Dehydration Units (2 Dehydration Units)
Heat Output: 1.0 MMBtu/hr (Maximum Design)
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001 MMScf/MMBtu
Fuel Consumpeion: 1 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 8.76 MMScf/yr

PM_{10} Emissions
Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 7.6 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.03 ton/yr

NO_x Emissions
Emission factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 100 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.44 ton/yr

VOC Emissions
Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.02 ton/yr

CO Emissions
Emission factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 84 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.37 ton/yr

SO_2 Emission
Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

- Emissions from the Still Vent, Flash Tank, and Glycol Reboiler were not calculated because the gas analyses submitted by BCPL showed that no VOC/HAP producing components are contained it the gas stream.

(53) Miscellaneous Tanks (water, oil, triethylene glycol)

VOC Emissions

	Tanks	Emissions	
Calculations:	(8) 50 gal Engine Jacket Water Tanks (EG/Water)	< 1 ton/yr	(Company Estimate)
	(8) 500 gal Ethylene Glycol Tanks (EG/Water makeup)	< 1 ton/yr	(Company Estimate)
	(8) 120 gal Compressor Crankcase Oil Tanks	< 1 ton/yr	(Company Estimate)
	(8) 230 gal Engine Crankcase Oil Tanks	< 1 ton/yr	(Company Estimate)
	(8) 350 gal Compressor Lubricator Oil Tanks	< 1 ton/yr	(Company Estimate)
	(8) 500 gal Waste Oil Tanks	< 1 ton/yr	(Company Estimate)
	(2) Triethylene Glycol Tanks	< 1 ton/yr	(Company Estimate)
	(1) Produced Water Tank	< 1 ton/yr	(Company Estimate)
	(1) Water/Oil Mix Holding Tank	< 1 ton/yr	(Company Estimate)
	(1) Filtered (Processed) Water Tank	< 1 ton/yr	(Company Estimate)
	Tank Total	< 10 ton/yr	

- Tank emissions are conservative because the tanks store oil, water, and glycol, which are relatively non-volatile liquids.

Tank Heaters (3)

Heat Output: 0.5 MMBtu/hr (Maximum Design)
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001 MMScf/MMBtu
Number of Heaters: 3
Fuel Consumpeion: 0.5 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 4.38 MMScf/yr

PM_{10} Emissions
Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 7.6 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.02 ton/yr
0.02 ton/yr * 3 heaters = 0.06 ton/yr

NO_x Emissions
Emission factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 100 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.22 ton/yr
0.22 ton/yr * 3 heaters = 0.66 ton/yr

VOC Emissions
Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.01 ton/yr
0.01 ton/yr * 3 heaters = 0.03 ton/year

CO Emissions
Emission factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 84 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.18 ton/yr
0.18 ton/yr * 3 heaters = 0.54 ton/yr

SO_2 Emission
Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.001 ton/yr
0.001 ton/yr * 3 heaters = 0.003 ton/yr

V. Existing Air Quality

The BCPL Symons Central Compressor Station is located in Sections 34 and 35, Township 9 South, Range 40 East, in Big Horn County, Montana. Big Horn County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined, based on ambient air quality modeling, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

Aspen Consulting & Engineering (Aspen) conducted air quality modeling for the proposed BCPL Symons Central Compressor Station Facility as part of the BCPL air quality permit application. The modeling was done to demonstrate compliance with the Montana and National Ambient Air Quality Standards (MAAQS/NAAQS). In addition, although a New Source Review (NSR) - Prevention of Significant Deterioration of Air Quality (PSD) increment analysis was not required for this permitting action, the Department determined that coal bed methane natural gas compressor stations must meet PSD increments for NO_x; therefore, a PSD increment analysis was conducted.

The Environmental Protection Agency (EPA) approved Industrial Source Complex (ISC3) model and 6 years of meteorological data (1984 and 1987 through 1990) were utilized for the air quality model. The surface data was collected at the Sheridan County Airport in Sheridan, Wyoming, and the upper air data was collected at the Lander Hunt Field, Wyoming site. The receptor grid elevations were derived from digital elevation model (DEM) files using the United States Geological Survey (USGS) 7.5-minute series (1:24,000 scale) digitalized topographic maps. The Decker, Holmes Ranch, and Pearl School Montana quadrangles, as well as the Acme, Bar N Draw, and Cedar Canyon Wyoming quadrangles were used to determine the receptor grid. The receptors were placed along the fence line at 50-meter (m) intervals, from the fence line to 1 kilometer (km) beyond the fence line at 100-m intervals, from 1 km beyond the fence line to 3 km beyond the fence line at 250-m intervals, and from 3 km beyond the fence line to 10 km beyond the fence line at 500-m intervals. In addition, receptors were placed on the Northern Cheyenne Indian Reservation to determine compliance with the PSD Class I Increment. Building downwash was calculated using the EPA Building Profile Input Program (BPIP). The building corner coordinates and peak roof heights were provided by a BCPL plot plan submitted as part of the air quality permit application and were used to determine the appropriate direction-specific building dimension parameters to use for each emission source evaluated in the model.

Originally, BCPL's application requested NO_x emission limits based on 1.25 grams per horsepower-hour (g/Hp-hr) for all of the compressor engines at the facility. Converting the g/Hp-hr parameters to a pound per hour (lb/hr) emission limit resulted in NO_x emission limitations of 4.63 lb/hr for the 1,680-Hp compressor engines and 2.31 lb/hr for the compressor engines equal to, or less than, 840-Hp. The lb/hr emission limits for NO_x were then used in the air quality model. However, the NO_x emission limits incorporated into the permit, as determined through the BACT analysis, are based on 1.0 g/Hp-hr. The Department re-ran the model using the BACT based emission limits; however, the NO_x emission limits for the compressor engines equal to, or less than, 840-Hp were inadvertently unchanged. Therefore, the modeling results would be relatively conservative because the two compressor engines equal to, or less than, 840-Hp were modeled at a NO_x emission rate of 2.31 lb/hr, rather than the 1.85 lb/hr emission rate as required by the permit. Table 1 summarizes the modeling parameters utilized for the model.

Table 1. Modeling Paramaters							
Source/emission rate		UTM Coordinates		Stack Parmaters			
Source ID	NO_x (lb/hr)	Easting (m)	Northing (m)	Height (m)	Temperature (°K)	Velocity (m/s)	Diameter (m)
SCUNIT1	3.70	357499	4984324	9.3	805	27.83	0.3962
SCUNIT2	3.70	357516	4984316	9.3	805	27.83	0.3962
SCUNIT3	3.70	357532	4984308	9.3	805	27.83	0.3962
SCUNIT4	3.70	357548	4984300	9.3	805	27.83	0.3962
SCUNIT5	3.70	357565	4984291	9.3	805	27.83	0.3962
SCUNIT6	3.70	357581	4984283	9.3	805	27.83	0.3962
SBUNITA	2.31	357681	4984293	6.85	895	45.29	0.3255
SBUNITB	2.31	357676	4984284	6.85	895	45.29	0.3255

In addition to the NO_x emissions from the BCPL Symons Central Compressor Station, NO_x emissions from facilities located within 10-km of the site were also included in the model. The total NO_x emissions ($NO + NO_2$) from each source were assumed as the basis for the model. Once the highest concentrations (one-hour high-second-high and annual high) were determined, the Ozone Limiting Method (OLM) was applied to the one-hour high-second-high NO_x concentration and the Ambient Ratio Method (arm) was applied to the annual high NO_x concentration to convert the total modeled NO_x emissions to NO_2 for comparison to the MAAQS and NAAQS. The model demonstrated that neither the MAAQS nor the NAAQS would be violated. The model results are summarized in Table 2.

Table 2. Ambient Modeling Results								
Pollutant	Avg. Period	NO_x Modeled Conc. ($\mu g/m^3$)	OLM/arm Adjusted to NO_2 ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)	Ambient Conc. ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	MAAQS ($\mu g/m^3$)	% of NAAQS/ MAAQS
NO_2	1-hr	746.7 [a]	262.5	75	339	--------	564	N/A / 59.8
	Annual	31.5 [b]	23.6	6	30	100	94	30.0 / 31.5

[a] Concentration calculated using OLM
[b] Applying arm with national default of 75%

Although a PSD increment analysis was not required by the ARM, due to the high projected development of coal bed methane in Montana, the Department determined that coal bed methane natural gas compressor stations must meet PSD increments for NO_x. Therefore, a Class I/Class II increment analysis was conducted. The modeling demonstrated compliance with the Class I and Class II increments. The Class I and Class II modeling results are summarized in Table 3.

Table 3. Class I and Class II Modeling Results							
Pollutant	Avg. Period	Class II Modeled Conc. ($\mu g/m^3$)	Class II Increment ($\mu g/m^3$)	% Class II Increment Consumed	Class I Modeled Conc. ($\mu g/m^3$)	Class I Increment ($\mu g/m^3$)	% Class I Increment Consumed
NO_x	Annual [a]	22.6	25	88.8	0.0029	2.5	0.1

[a] Applying arm with national default of 75%

In summary, modeling was conducted to determine compliance with the MAAQS and the NAAQS, as well as NO_x PSD increments. The modeling results demonstrated that neither the MAAQS nor the NAAQS would be violated. In addition, the PSD increment analysis for NO_x demonstrated neither the Class I NO_x increment nor the Class II NO_x increment would be exceeded.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment (EA), required by the Montana Environmental Policy Act, was completed for this project. The EA assesses the impacts specific to the proposed BCPL Symons Central Compressor Station and a copy is attached to this analysis of Permit #3250-00. Further, a programmatic environmental impact statement (EIS) was prepared for coal bed methane development in Montana, including the Powder River and Billings resource management plan areas. The EIS assesses the impacts of coal bed methane development from a broad, wide, planning perspective. A copy of the final environmental impact statement can be obtained on the Department's web site at the following Internet address:

http://www.deq.state.mt.us/CoalBedMethane/finaleis.asp.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air and Waste management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Bitter Creek Pipelines, LLC
Symons Central Compressor Station
P.O. Box 131
Glendive, MT 59330

Air Quality Permit number: 3250-00

Preliminary Determination Issued: 06/03/03
Department Decision Issued: 06/30/03
Permit Final: 07/16/03

1. *Legal Description of Site*: BCPL Symons Central Compressor Station would be located in Big Horn County, Montana, approximately 3 miles southeast of the town of Decker. The legal description would be Sections 34 and 35, Township 9 South, Range 40 East.

2. *Description of Project*: BCPL proposes to construct and operate a coal bed methane natural gas central compressor station. The facility would consist of six 1,680-horsepower (Hp) natural gas fired compressor engines, two natural gas fired compressor engines equal to, or less than, 840-Hp, two glycol dehydration units, and associated equipment. The facility is a central compressor station that receives natural gas from nearby production field facilities and dehydrates and compresses the natural gas for transmission through the pipeline.

3. *Objectives of Project*: The proposed project would provide additional business and revenue for BCPL by allowing the company to gather and sell larger quantities of natural gas. Coal bed methane would be received from nearby production field facilities and the BCPL Symons Central Compressor Station would dehydrate and compress the gas for transmission through a natural gas pipeline.

4. *Alternatives Considered*: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the Montana Air Quality Permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because BCPL demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in Permit #3250-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in the permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *Coal Bed Methane Programmatic Environmental Impact Statement:* The Bureau of Land Management (BLM), the Department, and the Montana Board of Oil and Gas Conservation (MBOGC) prepared a statewide Environmental Impact Statement (EIS) for coal bed methane development in Montana. The purpose of the EIS is to analyze potential impacts from projected oil and gas activities, particularly from coal bed methane exploration, production, development, and reclamation activities from a broad, wide, planning perspective. The planning area (analysis area) was statewide with emphasis placed on the Powder River and Billings Resource Management Plans (RMP), as well as, Blaine, Gallatin, and Park Counties. The BLM, the Department, and the MBOGC were joint lead agencies responsible for preparing the EIS. The lead agencies consulted with the United States Fish and Wildlife Service (USFWS), the Montana Bureau of Mines and Geology (MBMG), the Montana Department of Fish, Wildlife, and Parks (MFWP), the Montana Department of Natural Resources and Conservation (DNRC), the Montana State Historic Preservation Office (MSHPO), the Crow Tribe of Indians, the Northern Cheyenne Tribe, and the Lower Brule Sioux Tribe while preparing the EIS. The final EIS was issued in January 2003, and is available on the Department's web site at http://www.deq.state.mt.us/CoalBedMethane/finaleis.asp. This EA assesses the impacts specific to the proposed BCPL Symons Central Compressor Station Facility.

8. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic life and Habitats

Minor impacts on terrestrial or aquatic life and habitats would be expected from the proposed project because deer, antelope, coyotes, geese, ducks, and other terrestrials would potentially use the area around the facility and because the facility would be a source of air pollutants. The facility would emit air pollutants and corresponding deposition of pollutants would occur; however, as described in Section 7.F. of this EA, the Department determined, based on ambient air quality modeling, that any impacts from deposition would be minor. In addition, minor land disturbance would occur to construct the facility. Any impacts from facility construction would be minor due to the relatively small size of the project. Overall, any impacts to terrestrial and aquatic life and habitats would be minor.

B. Water Quality, Quantity, and Distribution

Minor impacts would be expected on water quality, quantity, and distribution from the proposed project because the facility would be a source of air pollutants. Surface water near the facility would include Seventy Six Creek, which is located approximately ¾ of a mile west of the facility, and Trall Creek, which is located approximately 1 mile north of the facility. The facility is a central compressor station, not a production field facility; therefore, no discharges into surface water would occur from operating the facility. However, minor amounts of water may be required to control fugitive dust emissions from the access roads and the general facility property. In addition, the facility would emit air pollutants and corresponding deposition of pollutants would occur; however, as described in Section 7.F. of this EA, the Department determined, based on ambient air quality modeling, that the chance of deposition of pollutants impacting water quality, quantity, and distribution would be minor.

Further, water quality, quantity, and distribution would not be impacted from constructing the facility because there is no surface water at or relatively close to the site. Furthermore, no discharges into surface water would occur and no use of surface water would be expected for facility construction. Therefore, no impacts to water quality, quantity, and distribution would be expected from facility construction. Overall, any impacts to water quality, quantity, and distribution would be minor.

C. Geology and Soil Quality, Stability, and Moisture

Minor impacts would occur on the geology and soil quality, stability, and moisture from the proposed project because minor construction would be required to develop the facility. Small buildings would be constructed, natural gas pipelines would be installed, and an access road would be developed. In addition, no discharges, other than air emissions, would occur at the facility. Any impacts to the geology and soil quality, stability and moisture from facility construction would be minor due to the relatively small size of the project.

Further, deposition of pollutants would occur; however, as described in Section 7.F of this EA, the Department determined, based on ambient air quality modeling, that the chance of deposition of pollutants impacting the geology and soil in the areas surrounding the site would be minor. Overall, any impacts to the geology and soil quality, stability, and moisture would be minor.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetation cover, quantity, and quality because minor construction would be required to develop the facility. Small buildings would be constructed, natural gas pipelines would be installed, and an access road would be developed.

In addition, no discharges, other than air emissions, would occur at the facility. Any impacts to the vegetation cover, quantity, and quality from facility construction would be minor due to the relatively small size of the project.

The facility would be a source of air pollutants and corresponding deposition of pollutants would occur; however, as described in Section 7.F of this EA, the Department determined, based on ambient air quality modeling, that the chance of deposition of pollutants impacting the vegetation in the area surrounding the site would be minor. Overall, any impacts to vegetation cover, quantity, and quality would be minor.

E. Aesthetics

Minor impacts would result on the aesthetic values of the area because the facility would be a new facility. Small buildings would be constructed to house the engines, natural gas pipelines would be installed, and an access road would be developed. However, any visual aesthetic impacts would be minor because natural gas compressor stations are typically "camouflaged" or painted a color that helps them amalgamate with the surrounding area. The facility would also create additional noise in the area. However, any auditory aesthetic impacts would be minor because the compressor engines would be required to be operated with non-selective catalytic reduction (NSCR) units and NSCR units are typically designed to be installed in mufflers. Overall, any aesthetic impacts would be minor

F. Air Quality

The air quality of the area would realize minor impacts from the proposed project because the facility would emit the following air pollutants: particulate matter less than 10 microns in aerodynamic diameter (PM_{10}); oxides of nitrogen (NO_x); carbon monoxide (CO); volatile organic compounds (VOC); and oxides of sulfur (SO_x). Air emissions from the facility would be minimized by limitations and conditions that would be included in Permit #3250-00. Conditions would include, but would not be limited to, BACT emission limits and opacity limitations on the proposed engines and the general facility.

Air quality modeling was conducted for the proposed BCPL Symons Central Compressor Station Facility as part of the BCPL air quality permit application. The modeling was done to demonstrate compliance with the Montana and National Ambient Air Quality Standards (MAAQS/NAAQS). In addition, although a New Source Review - Prevention of Significant Deterioration of Air Quality (PSD) increment analysis was not required for this permitting action, the Department determined that coal bed methane natural gas compressor stations must meet PSD increments for NO_x; therefore, a PSD increment analysis was conducted.

The Environmental Protection Agency (EPA) approved Industrial Source Complex (ISC3) model and 6 years of meteorological data (1984 and 1987 through 1990) were utilized for the air quality model. The surface data was collected at the Sheridan County Airport in Sheridan, Wyoming, and the upper air data was collected at the Lander Hunt Field, Wyoming site. The receptor grid elevations were derived from digital elevation model (DEM) files using the United States Geological Survey (USGS) 7.5-minute series (1:24,000 scale) digitalized topographic maps. The Decker, Holmes Ranch, and Pearl School Montana quadrangles, as well as the Acme, Bar N Draw, and Cedar Canyon Wyoming quadrangles were used to determine the receptor grid. The receptors were placed along the fence line at 50-meter (m) intervals, from the fence line to 1 kilometer (km) beyond the fence line at 100-m intervals, from 1 km beyond the fence line to 3 km beyond the fence line at 250-m intervals, and from 3 km beyond the fence line to 10 km beyond the fence line at 500-m intervals. In addition, receptors were placed on the Northern Cheyenne Indian Reservation to determine compliance with the PSD Class I Increment. Building downwash was calculated using the EPA Building Profile Input Program (BPIP). The building corner coordinates and peak roof heights were provided by a BCPL plot plan submitted as part of the air quality permit application and were used to determine the appropriate direction-specific building dimension parameters to use for each emission source evaluated in the model.

Originally, BCPL's application requested NO_x emission limits based on 1.25 grams per horsepower-hour (g/Hp-hr) for all of the compressor engines at the facility. Converting the g/Hp-hr parameters to a pound per hour (lb/hr) emission limit resulted in NO_x emission

limitations of 4.63 lb/hr for the 1,680-Hp compressor engines and 2.31 lb/hr for the compressor engines equal to, or less than, 840-Hp. The lb/hr emission limits for NO_x were then used in the air quality model. However, the NO_x emission limits incorporated into the permit, as determined through the BACT analysis, are based on 1.0 g/Hp-hr. The Department re-ran the model using the BACT based emission limits; however, the NO_x emission limits for the compressor engines equal to, or less than, 840-Hp were inadvertently unchanged. Therefore, the modeling results would be relatively conservative because the two compressor engines equal to, or less than, 840-Hp were modeled at a NO_x emission rate of 2.31 lb/hr, rather than the 1.85 lb/hr emission rate as required by the permit. Table 1 summarizes the modeling parameters utilized for the model.

Table 1. Modeling Parameters

Source/emission rate		UTM Coordinates		Stack Parmaters			
Source ID	NO_x (lb/hr)	Easting (m)	Northing (m)	Height (m)	Temperature (ºK)	Velocity (m/s)	Diameter (m)
SCUNIT1	3.70	357499	4984324	9.3	805	27.83	0.3962
SCUNIT2	3.70	357516	4984316	9.3	805	27.83	0.3962
SCUNIT3	3.70	357532	4984308	9.3	805	27.83	0.3962
SCUNIT4	3.70	357548	4984300	9.3	805	27.83	0.3962
SCUNIT5	3.70	357565	4984291	9.3	805	27.83	0.3962
SCUNIT6	3.70	357581	4984283	9.3	805	27.83	0.3962
SBUNITA	2.31	357681	4984293	6.85	895	45.29	0.3255
SBUNITB	2.31	357676	4984284	6.85	895	45.29	0.3255

In addition to the NO_x emissions from the BCPL Symons Central Compressor Station, NO_x emissions from facilities located within 10-km of the site were also included in the model. The total NO_x emissions ($NO + NO_2$) from each source were assumed as the basis for the model. Once the highest concentrations (one-hour high-second-high and annual high) were determined, the Ozone Limiting Method (OLM) was applied to the one-hour high-second-high NO_x concentration and the Ambient Ratio Method (arm) was applied to the annual high NO_x concentration to convert the total modeled NO_x emissions to NO_2 for comparison to the MAAQS and NAAQS. The model demonstrated that neither the MAAQS nor the NAAQS would be violated. The model results are summarized in Table 2.

Table 2. Ambient Modeling Results

Pollutant	Avg. Period	NO_x Modeled Conc. ($\mu g/m^3$)	OLM/arm Adjusted to NO_2 ($\mu g/m^3$)	Background Conc. ($\mu g/m^3$)	Ambient Conc. ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	MAAQS ($\mu g/m^3$)	% of NAAQS/ MAAQS
NO_2	1-hr	746.7 [a]	262.5	75	339	--------	564	N/A / 59.8
	Annual	31.5 [b]	23.6	6	30	100	94	30.0 / 31.5

[a] Concentration calculated using OLM
[b] Applying arm with national default of 75%

Although a PSD increment analysis was not required by the ARM, due to the high projected development of coal bed methane in Montana, the Department determined that coal bed methane natural gas compressor stations must meet PSD increments for NO_x. Therefore, a Class I/Class II increment analysis was conducted. The modeling demonstrated compliance with the Class I and Class II increments. The Class I and Class II modeling results are summarized in Table 3.

Table 3. Class I and Class II Modeling Results							
Pollutant	Avg. Period	Class II Modeled Conc. ($\mu g/m^3$)	Class II Increment ($\mu g/m^3$)	% Class II Increment Consumed	Class I Modeled Conc. ($\mu g/m^3$)	Class I Increment ($\mu g/m^3$)	% Class I Increment Consumed
NO_x	Annual [a]	22.6	25	88.8	0.0029	2.5	0.1

[a] Applying arm with national default of 75%

In summary, modeling was conducted to determine compliance with the MAAQS and the NAAQS, as well as NO_x PSD increments. The modeling results demonstrated that neither the MAAQS nor the NAAQS would be violated. In addition, the PSD increment analysis for NO_x demonstrated neither the Class I NO_x increment nor the Class II NO_x increment would be exceeded. Therefore, any impacts to air quality from the proposed facility would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search identified Haliaeetus Leucocephalus (Bald Eagle), Trionyx Spiniferus (Spiny Softshell), and Lomatium Nuttallii (Nuttall Desert-Parsley) as species of special concern in the area of the proposed facility. In this case, the area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Due to the minor amounts of construction that would be required, the relatively low levels of pollutants that would be emitted, the ambient air quality modeling results, and because the NRIS search did not identify any species of special concern in the immediate vicinity of the proposed facility, the Department determined that it would be unlikely that the proposed project would impact any species of special concern and that any potential impacts would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy

The proposed project would have minor impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined, based on ambient air quality modeling, that any impacts on air and water resources from the proposed project would be minor.

The proposed project would be expected to have minor impacts on the demand for the environmental resource of energy because power would be required at the site. The impact on the demand for the environmental resource of energy would be minor because the facility would be relatively small by industrial standards. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites located near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there are not any previously recorded historic or archaeological sites within the proposed area. However, SHPO stated that the absence of cultural properties in the area does not mean that they do not exist, but may reflect a lack of previous cultural resource inventories in the area because SHPO records indicate only one previous cultural resource inventory has been conducted. Because SHPO records indicate that only one previous cultural resource inventory has been conducted, SHPO recommended that a

cultural resource inventory be conducted prior to construction activities to determine whether any historical or archaeological sites exist in the area. Overall, the Department determined that the chance of the project impacting any historical and archaeological sites in the area would be minor due to the relatively small size of the project.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor due to the relatively small size of the project. Only small amounts of construction would be required to complete the project. In addition, ambient air quality modeling demonstrated that neither the MAAQS nor the NAAQS would be violated. In addition, the PSD increment analysis for NO_x demonstrated neither the Class I NO_x increment nor the Class II NO_x increment would be exceeded. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3250-00.

Additional facilities (production field facilities) would likely locate in the area to withdraw the methane from the nearby coal beds and supply the Symons Central Compressor Station Facility with gas to be dehydrated and compressed for transmission through a natural gas pipeline. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process. Further, as stated in Section 7 of this EA, a statewide EIS was completed to analyze potential impacts from coal bed methane exploration, production, development, and reclamation activities from a broad, wide, planning perspective.

9. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			X			Yes
B	Cultural Uniqueness and Diversity			X			Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population			X			Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECENOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would cause minor, if any, disruptions to native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project would take place in a relatively remote location. The nearest home not associated with the project would be approximately ½ mile from the facility and the facility would be relatively small by industrial standards. Additional activity (vehicle traffic, construction equipment, etc.) would be noticeable during facility construction; however, compressor stations typically do not require day-to-day employees and once the facility is constructed, activities associated with the operation of the facility would be minor. Overall, any impacts to the social structures and mores in the area would be minor.

B. Cultural Uniqueness and Diversity

The proposed project would cause minor, if any, impacts to the cultural uniqueness and diversity of the area because the proposed project would take place in a relatively remote location. The nearest home not associated with the project would be approximately ½ mile from the facility and the facility would be relatively small by industrial standards. Additional activity (vehicle traffic, construction equipment, etc.) would be noticeable during facility construction; however, compressor stations typically do not require day-to-day employees and once the facility is constructed, activities associated with the operation of the facility would be minor. Overall, any impacts to the social structures and mores in the area would be minor.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in only minor impacts to the local and state tax base and tax revenue because only one or two additional employees would be expected as a result of constructing the facility. In addition, only minor amounts of construction would be needed to complete the project; therefore, any construction related jobs would be temporary.

D. Agricultural or Industrial Production

The land at the proposed location is rural agriculture grazing land; however, because the facility would be relatively small, the proposed project would result in only minor impacts to agricultural production. The proposed project would have minor impacts to industrial production because the proposed project would be a new industrial source locating in the proposed area. The facility would emit air pollutants and corresponding deposition of pollutants would occur; however, as Section 7.F of this EA explains, the Department determined, based on ambient air quality modeling, that the chance of deposition of pollutants impacting agricultural or industrial production in the area surrounding the site would be minor. Overall, any impacts to agricultural or industrial production would be minor.

Additional facilities (production field facilities) would likely locate in the area to withdraw the methane from the nearby coal beds and supply the Symons Central Compressor Station Facility with gas to be dehydrated and compressed for transmission through a natural gas pipeline. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Impacts from any future facilities would be assessed through the appropriate permitting process. Further, as stated in Section 7 of this EA, a statewide EIS was completed to analyze potential impacts from coal bed methane exploration, production, development, and reclamation activities from a broad, wide, planning perspective.

E. Human Health

The proposed project would result in only minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined, based on ambient air quality modeling, that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would have minor, if any, impacts on access to recreational and wilderness activities because of the relatively remote location and the relatively small size of the facility. The proposed project would have minor impacts on the quality of recreational and wilderness activities in the area because the facility, while relatively small by industrial standards, would be visible and would produce noise.

G. Quantity and Distribution of Employment

The proposed project would have minor, if any, impacts on the quantity and distribution of employment because only one or two permanent employees would be hired as a result of the proposed project. In addition, temporary construction-related positions would result from this project but any impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the facility and the corresponding relatively short time period that would be associated with constructing the facility.

H. Distribution of Population

The proposed project would have minor, if any, impacts on the distribution of population in the area because the facility would be located in a relatively remote location and the proposed project would only create one or two new permanent jobs. If one or two people were hired, the new employees would represent a very small and minor change in the population of the area.

I. Demands for Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue Permit #3250-00 and to assure compliance with applicable rules, standards, and Permit #3250-00. In addition, there would be minor impacts on the demands for government services to regulate the increase in vehicle traffic that would be associated with constructing and operating the facility. The increase in vehicle traffic would be primarily during facility construction because compressor stations typically do not require day-to-day employees. However, vehicle traffic would be relatively minor due to the relatively short time period that would be required to construct the facility. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on the local industrial and commercial activity because the proposed project would represent only a minor increase in the industrial and commercial activity in the area. The proposed project would be relatively small and would take place at a relatively remote location.

Additional facilities (production field facilities) would likely locate in the area to withdraw the methane from the coal beds and supply the Symons Central Compressor Station Facility with gas to be dehydrated and compressed for transmission through a natural gas pipeline. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Impacts from any future facilities would be assessed through the appropriate permitting process. Further, as stated in Section 7 of this EA, a statewide EIS was completed to analyze potential impacts from coal bed methane exploration, production, development, and reclamation activities from a broad, wide, planning perspective.

K. Locally Adopted Environmental Plans and Goals

The EIS that was completed to analyze the potential impacts from coal bed methane exploration, production, development, and reclamation activities in Montana would be considered an environmental plan or goal for the proposed project. The proposed Symons Central Compressor Station Facility would be constructed and operated within the scope of the EIS.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, the industrial production, employment, and tax revenue (etc.) changes resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3250-00.

Additional facilities (production field facilities) would likely locate in the area to withdraw the methane from the coal beds and supply the Symons Central Compressor Station Facility with gas to be dehydrated and compressed for transmission through a natural gas pipeline. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Impacts from any future facilities would be assessed through the appropriate permitting process. Further, as stated in Section 7 of this EA, a statewide EIS was completed to analyze potential impacts from coal bed methane exploration, production, development, and reclamation activities from a broad, wide, planning perspective.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permit action is for the construction and operation of a coal bed methane natural gas central compressor station. A programmatic EIS was prepared for coal bed methane development in Montana. A copy of the final environmental impact statement can be obtained on the Department's web site at http://www.deq.state.mt.us/CoalBedMethane/finaleis.asp. This EA assesses the impacts specific to the proposed BCPL Symons Central Compressor Station and Permit #3250-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there are no significant impacts associated with the proposed BCPL Symons Central Compressor Station.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office; Natural Resource Information System – Montana Natural Heritage Program; Bureau of Land Management, Montana Board of Oil and Gas Conservation; United States Fish and Wildlife Service; Montana Bureau of Mines and Geology; Montana Department of Fish, Wildlife, and Parks; Montana Department of Natural Resources and Conservation; Crow Tribe of Indians; Northern Cheyenne Tribe; and Lower Brule Sioux Tribe.

Individuals or groups contributing to this EA: Montana Department of Environmental Quality; Montana Historical Society – State Historic Preservation Office; Natural Resource Information System – Montana Natural Heritage Program; Bureau of Land Management, Montana Board of Oil and Gas Conservation; United States Fish and Wildlife Service; Montana Bureau of Mines and Geology; Montana Department of Fish, Wildlife, and Parks; Montana Department of Natural Resources and Conservation; Crow Tribe of Indians; Northern Cheyenne Tribe; and Lower Brule Sioux Tribe.

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